Original/Duplicate/Triplicate

SBR No. 59/17-18
DATED 30/6/2017

CONTRACT CERTIFICATE

EE/ELE/Y/BR No. 59/17-18

No.1ST RA Bill (For Other Works) Date..... Dt. 30-6-17 2010

Division: **Electricals (Yelahanka)** Sub-Division: **Electricals**

Bill Received No. Dated Divisional Cash Book Voucher No..... Dated.....
Sub Divisional **Job Code :-09-17-000037**

Schedule Docket No. Head of Account : **P - 1771**
D.R.No.

Name of Work :- Providing & Fixing Street Lights With timer in ward no 09 Vidyaranyapura sub division.
Name of Contractor and Full Address:**M/S Sri Lakshmi Varadaraja Electrical Stores.**
Reference to Agreement No:EE/Ele/YZ/WO/ 18 /17-18 Date:26/05/2017

Certified that the measurements were taken by me on 30/6/17 and recorded of Pages 311 515 to 529 of measurement Book No. and that the work is satisfactorily executed.

Sri Lakshmi Varadaraja Electrical Stores Proprietor 316/17-18

Contractor **Officer-in-charge of work**

Certified that the measurement were taken by me on 30/6/17 and found correct. The work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of and imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Assistant Executive Engineer (Elec) Yelahanka Sub-Division Bruhat Bangalore Mahanagara Palike

Sub-Division Officer

II Memorandum of Payment

1)	Total value of work done or supplies made as per account within	Bill= 1818600=00
2)	Deduct amount to be held in reserve being .....percent Rs.....	IT 1% 18,186=00
3)	" Balance	VAT 4% 72744=00
4)	Deduct Payment:	LWC 1% 18,186=00
a)	Amount of previous payment as in the Office Cash Book Voucher No.....Dated.....S.D. No..... Amount adjusted towards cash advance recovery of	CBF 0.1% 1819=00
b)	Payments Now made: cost store or other material supplied. recovery of amount creditable to this/other work. Amount paid on this bill Cheque / Cash.	deductions 1,10,935=00
		Cheque 17,07,665=00
5)	Balance being unpaid value of work done held in reserve.	
6)	Deduct cash advance made on the Office cash Book Voucher No..... dated.....less adjustments.	
7)	Net amount due to or from Contractor unadjustments items.	
8)	Advance to Contractor for materials brought to site (as detailed) within.	
9)	Value of Government materials supplied.	
	Total amount adjusted	

Sri Lakshmi Varadaraja Electrical Stores Proprietor

Contractor's Signature

Received Rs..... (in words).....
.....
by cash and by adjustment of Payment as per memorandum
(in final settlement of all demands)

(For use in the Office)

Witness
1.
2.

Sri Lakshmi Varadaraja Electrical Stores Stamp Proprietor

Dated Signature of Contractor
Paid by me by Cheque No.....Dated.....
Cash Rs.....
Dated.....
Initials of Officer making payment

ಲೆಕ್ಕ ಶೀರ್ಷಿಕೆ P0771 ಪಾವತಿ ಮಾಡಬೇಕಾಗಿದೆ
ರೂ.18,18,600=00 ಬಿಲ್ ಮಾಡಿ ಸ್ವೀಕರಿಸಿದೆ
ರೂ.17,07,665=00 ಚೆಕ್ ನೀಡಬೇಕಾಗಿದೆ
ರೂ.1,10,935=00 ಮೊತ್ತವನ್ನು ಮಾಡಿದೆ

Executive Engineer

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು ಕಾ.ಪಾ.ಅ.(ವಿ) ಯಲಹಂಕ ವಲಯ

Sl. No	Description of Item	Unit
	Name Of Work:- Providing & Fixing Street Lights With timer in ward no 09 Vidyaranyapura sub division.	
1	LED Street light.Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminare > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & FixtureEfficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacture. Suitable for B1/B2 Roads as per IS 1944 Part I & Part III.LED Streetlight 65watts	Nos
2	Supplying and Fixing of.....mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires. Using 32mm dia G.I.pipe	Each
3	Wiring for lighting/power circuit using one of PVC insulated 1100v grade stranded Aluminium unsheathed wire single core/multi core cable in open or consealed system of wiring. a)4 sqmm.	Each
4	Supplying of 1.1kv grade Aerial Bunched cable stranded & compacted Aluminium Phase conductor and Stranded Messenger conductor with all aluminium alloy, Phase conductor is insulated with XLPE compound insulated Messenger with specified IS - 14255:1995 & confirming to GTP of group A. 2 X 16 + 1 X 25 SQ.MM	Per Mtr
5	Stringing of 1.1kv LT Arial Bunched Cable, BESCOM SR	Per Mtr
6	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.f)40-63 Amps SP, Group A	Each
7	6)40-63Amps TPN	
8	Supply and fixing of 4-pole power contactor with NO/NC contacts on existing wood / panel board using necessary bolts, nuts, washers and wiring etc., complete. d) 100-125 Amps	Each
9	Wiring for lighting/power circuit using one of PVC insulated 1100v grade, multis and **Copper** conductor single core cable in open or consealed system of wiring.I Group A Materials.g)16 sqmm	Per Mtr
10	Supplying and fixing phylum brand hand plastic sheet 3mm thick with necessary niches for fixing switches, regulators etc., and fixing on exisiting wood or metal box using N.F.screws	Sqcm
11	Open Conduit Systeme: Supplying heavy gauge PVC conditpipe,,,,,,,,,, dia confirming to IS 2509 with suitable size bends,junction boxes, adhesibve paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall stone structure or rawl plug incase of brick walls and cement plastering damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. c)25mm dia 2mm thick	Mtrs
12	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. And M.S. flat... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. A)40x40x6mm.	Mtrs
13	Supplying and fixing electro mechanical timer (without contactor) using necessary bolts, nuts and waqshers etc.. Group B, PWD Elec SR 2006-07.	Mtrs

Previous Measurement		Present Measurement			Total Upto Date		Remarks
Qty	Cost	Qty	Rate	Amount	Qty	Cost	
		99	13000.00	1287000.00	99	1287000.00	
		136	200.00	27200.00	136	27200.00	
		250	10.00	2500.00	250	2500.00	
		110	200.00	22000.00	110	22000.00	
		110	20.00	2200.00	110	2200.00	
		6	300.00	1800.00	6	1800.00	
		3	1500.00	4500.00	3	4500.00	
		3	5500.00	16500.00	3	16500.00	
		23	25.00	575.00	23	575.00	
		20000	0.30	6000.00	20000	6000.00	
		76	25.00	1900.00	76	1900.00	
		27	200.00	5400.00	27	5400.00	
		3	2500	7500.00	3	7500.00	

14	Supplying and stringing of ACSR Conductor (6/2.59mm Al +1/2.59mm Steel).	Mtrs
15	Supplying and Fixing .....including all Hardware's etc. complete as per the standard technical specification of BESCOM 1.1 KV Pin Insulator	Nos
16	No. 8 Strain Insulator	Nos
17	Supply and fixing of .....cross arm including all Hardware's complete as per the standard technical specification of BESCOM. 2 Pin 45x45x5mm -510mm	Nos
18	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete.16SWG	Sqcm
19	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper conductor single core wire in open or concealed system of wiring as per IS-694:1990 & confirming to GTP of GROUP -B.1 sqmm.	Mtrs
20	Supply and installaion / Fixing / Provision for mounting of HRC Fuse/ MCB with suitable connector/ terminal for 3 Ph / 1 Ph connections with Loop-In & Loop-Out terminals for 10 SQmm/25 Sqmm 3.5 C Al/ Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof having internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and / or grommets. 200x200x98mm	Nos
21	Supplying and fixing of 125W Garden Lighting Prince MIDI type (Without Lamp) Make : K-Lite or equivalent	Nos
22	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.	Nos
23	Supply of 125W Mercury Vapour lamp with E27 Base, Lumen output greater than 6000 lumen & CRI 45.Avg Burning life greater than 20,000 hrs.	Nos
24	**Thiristor based single/ Three phase smart street light control and monitoring system** Remotely control and and monitorable smart street light system by using web or mobile application .smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management.2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : 2) Handles controlling , data handling and other communication process. Communication unit: GSM/GPRS quad bandwith RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5) Embedded Firmware: Firmware to control , handle , process the data and communicate it wirelessly.6) Metal Enclosure : IP66 weather prof metal enclosure.7) Transformers: Customized step down transformers for various purposes.8) Wiring and other device assembly components.	Nos
	Totl Rs	

Certificate: 1. Certefied that the Above Work has been carreid out satisfactorily

T.C.N. Reddy
JTO

		1000	70.00	70000.00	1000	70000.00	
		25	30.00	750.00	25	750.00	
		25	15.00	375.00	25	375.00	
		30	700.00	21000.00	30	21000.00	
		75000	0.30	22500.00	75000	22500.00	
		145	20.00	2900.00	145	2900.00	
		20	900.00	18000.00	20	18000.00	
		32	9000.00	288000.00	32	288000.00	
		32	125.00	4000.00	32	4000.00	
		30	200.00	6000.00	30	6000.00	
		0	9000.00	0.00	0	0.00	
				1818600.00		1818600.00	